

AMENDMENTIn the Specification

Enclosed are Replacement Paragraphs “marked up” to show changes made relative to the immediate prior version of the specification.

Page 1, line 6 add the heading BACKGROUND OF THE INVENTION.

Page 3, line 23, add the heading SUMMARY OF THE INVENTION.

At page 7, the paragraph beginning at line 6 is amended to read as follows:

Several advantages arise from the use of a supersonic second gas jet. First, the rate of decay of the first gas jet tends to be less than when a subsonic first gas jet is employed. Accordingly, the first gas jet can be allowed to travel a greater distance before impinging upon the slag layer or the surface of the melt. The rate of damage to the Laval nozzles caused by the splashing metal or slag can thus be kept to an acceptable level. Secondly, the velocity of the second jet can be selected such that it too is able to penetrate the slag layer and the surface of the molten metal. Accordingly, any particles migrating from the first jet to the second jet are still largely carried into the molten metal. Thirdly, by forming the first and second jets at similar velocities to one another we believe that most of the particles can be confined to the first jet without migrating to the second jet.

Page 8, line 23, add the heading BRIEF DESCRIPTION OF THE DRAWINGS.

Page 9, before line 5, add the heading DESCRIPTION OF THE INVENTION.

At page 12, the paragraph beginning at line 5 is amended to read as follows:

The combustion chamber 46 terminates at its distal end in a second or outer Laval nozzle 52.

The arrangement of the combustion chamber 46 and the Laval nozzle 52 causes the flame formed in the combustion chamber 46 to be accelerated to a supersonic velocity in operation of the lance 10. This flame shrouds the first gas jet issuing from the first Laval nozzle 48. The second Laval nozzle 52 is formed as a double-walled member. The outer wall of the second Laval nozzle 52 is contiguous with the distal end of the outermost tube 24. The outermost tube 24 is thus able to provide cooling to the second Laval nozzle 52 in operation of the lance 10, the baffle 42 extending into the annular space defined by the inner and outer walls of the second Laval nozzle 52. The first or inner Laval nozzle 48 is set back relative to the tip of the ~~first~~ second or outer Laval nozzle 48 52 and terminates in the divergent portion of the ~~first~~ second Laval nozzle 48 52.